

STRIZHENOVA, Nina Fedorovna; YUSUPOV, Akhat Sultangareyevich;
VVEDENSKIY, Ye.A., red.; RAKHMATULLINA, R.Kh., tekhn. red.

[Ways of increasing labor productivity in drilling] Puti
rosta proizvoditel'nosti truda v burenii. Ufa, Bashkirske
knizhnoe izd-vo, 1962. 74 p. (MIRA 16:6)
(Oil well drilling--Labor productivity)

BUGROV, Valentin Aleksandrovich; STRIZHENNOVA, Nina Fedorovna; BRENTS,
A.D., kand. ekon. nauk, retsenzent; GORKIN, S.F., kand. ekon.
nauk, retsenzent; LATUKHINA, Ye.I., ved. red.; STAROSTINA,
L.D., tekhn. red.

[Economics, organization, and planning of petroleum production
enterprises]Ekonomika, organizatsiia i planirovanie neftedoby-
vaiushchikh predpriatii. Moskva, Gostoptekhizdat, 1962. 333 p.
(MIRA 16:4)

(Oil fields--Production methods)

L 35559-65 EWP(w) EM
ACCESSION NR: AP5008152

S/0286/65/000/005/0030/0030

10
B

AUTHORS: Polyakov, Yu. A.; Strizhenova, V. F.

TITLE: A shaft-rotating device for turbomachines. Class 14, No. 168730

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 5, 1965, 30

TOPIC TAGS: turbomachine

ABSTRACT: This Author Certificate presents a shaft-rotating device for turbomachines, such as paired turbines, with a drive gear in the housing and a following gear on the principal shaft, driven by means of a reducing gear from an electric motor (see Fig. 1 on the Enclosure). For increasing the reliability the housing contains a nozzle device for supplying liquid to the driven gear, using a hydraulic drive, for example, as the driving wheel when the turbomachine is stopped. Orig. art. has 1 figure.

ASSOCIATION: none

SUBMITTED: 19Jul63

ENCL: 01

SUR CODE: PR

NO REF SOV: 000

OTHER: 000

Card 1/2

KASATKIN, B. S. (Kiyev); STRIZHEUS, Zh. N. (Kiyev)

"Step" formation on fracture surfaces during the brittle failure of commercial-grade iron. Izv. AN SSSR. Otd. tekhn. nauk. Met. i topl. no.6:112-124 N-D '62.

(MIRA 16:1)

(Iron-Brittleness) (Electron microscopy)

ZUYEV, Dm.; SLAGODA, F.K.; BEDNARSKAYA, G.A.; KRAVCHENKO, Z.I.;
STRIZHEV, A.N.; PEVZNER, V.I., tekhn. red.

[Rural calendar for 1962] Sel'skii kalendar' 1962. Mo-
skva, Sel'khozizdat, 1961. 174 p. (MIRA 15:11)
(Almanacs)

KOZLOVSKAYA, O.I.; STRIZHEVA, N.N.

Effect of the sodium salt of para-aminosalicylic acid on some
vascular reflexogenic zones. Fiziol.zhur. [Ukr.] 2 no.5:118-122
S-O '56. (MLRA 10:1)

1. Kiivs'kiy medichniy institut imeni akademika O.O. Bogomol'tsya,
kafedra farmakologii.

(SALICYLIC ACID) (RESPIRATION) (BLOOD PRESSURE)

FILIMOVSKAYA, Ye.F.; STRIZHEVA, V.G.

Determination of the concentration of xylital O-15, a textile
treating preparation. Khim.volok. no.6:42-43 '61. (MIRA 14:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut iskusstvennogo
volokna,
(Finishes and finishing)

MIKUNIS, R.I., dotsent; SHLAFMAN, I.I.; STRIZHEVSKAYA, A.Z.

Rheumocarditis during the interparoxysmal period. Vrach.
delo no.7:9-12 Jl'63. (MIRA 16:10)

1. Kafedra fakul'tetskoy terapii (zav. - prof. B.S.Sklyar
[deceased] Vinnitskogo meditsinskogo instituta i 3-ya go-
rodskaya bol'nitsa.
(RHEUMATIC HEART DISEASE)

KOROL'KOV, I.I.; STRIZHEVSKAYA, I.S.; LIKHOVID, R.D.; PARAMONOV, G.D.;
ZYBIN, S.Ye.; BATIKOV, L.S.; DOLGOKHVOSTOV, I.A.

Experiments in the production of hydrolysates for growing yeast
at the Ivdel' Hydrolysis Plant. Gidroliz. i lesokhim. prom.
16 no.5:3-7 '63. (MIRA 17:2)

1. Gosudarstvennyy nauchno-issledovatel'skiy institut gidroliznoy
i sul'fitno-spirtovoy promyshlennosti (for Korol'kov,
Strizhevskaya, Likhovid, Paramonova). 2. Ivdel'skiy gidroliznyy
zavod (for Zybin, Batikov, Dolgokhvostov).

137-58-1-846D

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 1, p 122 (USSR)

AUTHOR: Strizhevskaya, L. G.

TITLE: On the Industrial Weldability of Cast and Wrought Austenitic Steels
(K voprosu tekhnologicheskoy svarivayemosti litoy i deformativnoy staley austenitnogo klassa)

ABSTRACT: Bibliographic entry on the author's dissertation for the degree
of Candidate of Technical Sciences, presented to the Mosk. aviats.
tekhnol. in-t (Moscow Institute of Aviation Technology), Moscow,
1957

ASSOCIATION: Mosk. aviats. tekhnol. in-t (Moscow Institute of Aviation
Technology), Moscow

1. Steels--Welding 2. Steel castings--Welding

Card 1/1

STRIZHEVSKAYA, L. G. Cand Tech Sci -- (diss) "On the Problem of the Technological Welding Capacity of Austenite-Class Cast and Deformed Steels." Mos, 1957. 12 pp 20 cm. (Min of Higher Education USSR, Mos Aviation Engineering Inst), 110 copies (KL, 25-57, 114)

135-5-3/14

SUBJECT: USSR/Welding

AUTHOR: Strizhevskaya L.G. engineer.

TITLE: Spot-welding Cast and Deformed Austenitic Steel. (Tochechnaya svarka litoy i deformirovannoy staley austenitnogo klassa).

PERIODICAL: "Svarochnoye Proizvodstvo", 1957, # 5, pp 9-12 (USSR).

ABSTRACT: The purpose of the experimental investigation described was to reveal the causes of cracks in weld joints between cast chrome-nickel-tungsten-steel "21-11-2.5" and stainless steel "1X18H9T". The steel "21-11-2.5" is austenitic steel (3) of the following composition 0.1 - 0.25 % C; 0.6 - 1.4 % Si; 0.6 - 1.2 % Mn; 19 - 23 % Cr; 10.5 - 13% Ni, 2.4-3% W; \leq 0.2 % Ti; \leq 0.04 % S; \leq 0.045% P. In practical work, sound welds between the two aforementioned brands of steel are not always obtainable, and the causes of cracks, which lay alongside or across the weld on the side of cast steel, have not yet been found.

From experimental results it appears that cast steel "21-11-2.5" has two varieties of macro-structures- a columnar one and an equiaxial one - with respective variations in micro-structures.

Card 1/3

135-5-3/14

TITLE: Spot-welding Cast and Deformed Austenitic Steel. (Tochechnaya svarka litoy i deformirovannoy staley austenitnogo kiassa).

The resistance limit of the steel with equiaxial structure is higher than that of the steel with columnar structure. The relative elongation and contraction are higher in steel with the columnar structure. The difference of properties of steel with different macrostructure has not been taken into consideration under the practical conditions of spot-welding. Sound welds are only obtained with the columnar structure. Welding the equiaxial structure under these welding conditions leads to weld defects which are caused by higher resistance to plastic deformation.

In the result of experiments, welding is recommended to be performed under conditions which take into consideration the established peculiarities of cast steel and give sound welds with both types of macro-structure. The recommended conditions are pressure on electrodes 550 kg, current 6500 amps; electrical impulses of 0.32 sec. The ultimate shearing stress amounts to 850-900 kg for a spot weld made under such conditions, with specimens of 1+1.5 mm thickness, electrode diameter on the side of cast steel 5.5 mm, and on the side of "1X18H9T" steel 4 mm.

Card 2/3

The investigation has been performed under the direction of

135-5-3/14

TITLE: Spot-welding Cast and Deformed Austenitic Steel. (Tochechnaya svarka litoy i deformirovannoy staley austenitnogo klassa).

Professor A.A. Alov, Doctor of Technical Sciences.

The article contains 4 photographs, 4 diagrams, 2 property charts, and 4 references (all Russian).

ASSOCIATION: MOSKVA, Technological Aviation Institute (Moskovskiy Aviationskiy Technologicheskiy Institut-MATI)

PRESENTED BY:

SUBMITTED:

AVAILABLE: At the Library of Congress.

Card 3/3

12(5,7)

DDV/125-10-17/10

AUTHOR: Poplavko, M.V., Strizhevskaya, T.G. and Nikiforova, V.O.
(Moskva)

TITLE: The Effect of Alloys on Welding of Copper by Automatic Argon Arc Welding Machines with Tungsten Electrodes

PERIODICAL: 'Tekhnicheskaya svarka', 1956, No 7, pp 46-56 (USSR)

ABSTRACT: The welding properties of copper alloys containing Ni, Al, Si, Cd, Co, Cr, Zr and Ti have been researched into. According to the effect exercised on copper welding, all the enumerated elements can be divided into three groups: 1) elements that form with copper a number of hard solutions - Ni; 2) elements which are dissolvable in copper in limited quantities only - Al, Si, Cd, Be, Co; 3) elements that form with copper eutectic mixtures and chemical compositions - Cr, Zr, Ti. The welding of copper containing Ni (0,1-1%) does not differ from pure copper welding. The presence of Ni in such quantities even improves the welding properties of copper. The welds obtained possess high porosity.

Card 1/7

2007/10/27-2017-7/10

The Effect of Alloys on Welding of Copper by Automatic Argon Arc Welding with Tungsten Electrodes

Copper is very plastic. It is dissolvable in copper up to 6% (at 500°C); however, its presence sharply affects the welding properties of copper, even when it appears in small quantities. Alloys with Si-contents (0,01 - 0,4%) permit good welding; otherwise, Si is dissolvable in copper up to 4% (at 400°C). Cd in quantities of 0,09-0,6% tends to form hot cracks during the process of welding. Be has a strong negative bearing on the welding of copper. The welds of alloys containing 0,05-0,5% Be are rough, cracked and have a dark oxidized surface. Introduction of Co in quantities of 0,2-1,5% does not affect the copper welding. The welds are well formed, their surface is smooth and bright. The system Cu-Cr, with 0,65% Cr, forms a eutectic mixture. Admitted in quantities of 0,3-1,0% improves the welding properties of copper. However, the larger amounts of Cr affect the welding. The welds are not really smooth and even; their surface is of a gray-blue

Cont'd 2/3

SOV/125-59-7-7'10

The Effect of Alloys on Welding of Copper by Automatic Argon Arc Welding Machines with Tungsten Electrodes

color. Zr in quantity of 13.7% forms with copper an eutectic mixture; otherwise, Zr has a negative effect on the welding. Only when its contents are very small it does not affect the welding. Ti worsens the welding as it forms with copper a number of brittle compositions, ($TiCu_3$, $TiCu$, etc.). It increases the number of cracks during the process of welding. The welds obtained through argon arc welding on systems Cu-Co and Cu-Cd are highly porous. Introduction of Si, Cr, Ti, Be, Al and Zr entails disappearance of weld porosity. Co, Si, Cr, and Cd make the weld very plastic. The strength of welds of copper alloys containing Cr, Si, Cd, Co, Ni and Zr amounts to 80-85% of the base metal strength. The welding properties of copper alloys can be essentially altered by adding special filler metals. There are 3 graphs, 12 photographs and 3 Soviet references.

Card 3/3

SUBMITTED:

February 17, 1959

12300 1573

33402
S/666/61/000/000/004/004
D215/D305

AUTHORS: Poplavko, M.V. and Strizhevskaya, L.G.

TITLE: Weldability and welding technology of copper alloys

SOURCE: Svarka tsvetnykh metallov i splavov; sbornik statey.
Balkovits, D.S. and Poplavko, M.V., eds. Moscow, Oborongiz,
1961, 111-158

TEXT: The authors surveyed the field generally, though the treatment of tungsten arc welding was centered around their own work with K.G. Niki-forova (Avtomatische svarka, no. 7, 1959). The following topics are discussed: The various grades of Cu available, influences of O₂, solubility of H₂, effects of Bi, Pb and S on welding and working, influence of these and other elements on electrical conductivity and hot strength, oxidation of Cu, and the influence of alloying elements. Physical properties which complicate the welding of Cu are its high thermal conductivity, expansion coefficient, and shrinkage. Al, Si, Zn, Zr, Ti, Be, Cr

Card 1/4

Weldability and welding ...

33402
S/666/61/000/004/004
D215/D305

decrease porosity but Mn increases it. Effect of Bi, Pb and O₂ on hot cracking and the influence of alloying elements on the weldability of copper in tungsten arc welding of 1.5 mm sheet are described. Elements such as Fe, Ni, Co in which H₂ solubility increases with temperature tend to increase porosity in Cu, while Ti and Zr, in which H₂ solubility decreases with increasing temperature could possibly cause hot cracking owing to the pressure of liberated hydrogen within the lattice on heating. The effects of Ni, Mn, Fe, Co, Si, Cr, Cd, Al, Be, Zr, Ti in amounts (in most cases) up to 1.5%, their influence on porosity, hot cracking, weld and heat-affected zone microstructure and mechanical properties are given. Gas-shielded welding technology for Cu and alloys is described. Helium is preferred for tungsten-arc welding; the electrode should be vertical and filler metal added ahead of the arc in line with the deposited bead. With thin sheets the filler can be preplaced as a profiled insert and melted by the arc, preferably over stainless steel backing. The best results for Cu are obtained in P-deoxidized material (99.93% Cu, 0.06% P, 0.005% Fe) with the filler metal containing 0.25-3% silicon. Cr bronzes

Card 2/4

33402

S/666/61/000/000/004/004
D215/D305

Weldability and welding ...

(0.4-1% Cr) are welded satisfactorily with a filler of 0.5-0.7% Ni, 0.04-0.09% Zr, remainder Cu. Cu-Ni alloys are subject to porosity and grain growth in the h.a.z., but Ti up to 0.5-0.7% and Zr 0.1-0.2% remedy this, though at the expense of bead shape. A description is given of the electrical and thermal conductivities of welded joints, influence of slag in submerged-arc welding of Cu (ceramic v.s. fused), influence of filler wire and the welding of Cu and alloys to other metals. Cu-steel joints can be made with a Cu filler with only slight surface fusion of the steel. Before welding Si bronze to steel the former is buttered with Al bronze. Mig welding of Si or Al bronze or Cu-Ni (90:10) to steel can be effected with a 10% Al electrode. Metal-arc Cu electrodes with KOMSOMOLETS (Komsomolets) coatings are also used for welding Cu or Cu-Ni to steel. Submerged-arc welding with bronze wire is best for overlaying steel. Joining to austenitic steels, welding techniques to avoid excessive steel fusion, weld structures without filler or with Cu or austenitic steel filler, and tungsten arc welding of Cu and alloys to Ni and its alloys or to Al are described. There are 26 figures, 28 tables and 30 references: 21 Soviet-bloc and 9 non-Soviet-bloc. The 4 most recent references to English-language publications read as follows: E. Davis, Welding and Metal Card 3/4

Weldability and welding

33402
S/666/61/000/000/004/004
D215/D305

Fabrication, v. 11, no. 10 (1953); P.L. Hemmes, Welding Journal, v. 37,
no. 8, (1958); V. Abaravich, The Welding Journal, v. 37, no. 3, (1958);
L. Gook and M. Stavisch, The Welding Journal, v. 11, no. 4, (1956); 348-
355.

X

Card 4/4

STRIZ'EVSKAYA, L. G. (Cand. Tech. sciences), and Starov, L. A. (Engineer) (Moscow)

"Welding by fusion of certain combinations of metals" considered the theoretical basis of conditions of appearance of metallic connection between heterogeneous metals. The technology of welding of titanium with other metals was developed.

Report presented at the 1st All-Union Conference on welding of heterogeneous metals, at the Inst of Electric Welding im. Ye. O. Paton, 14-15 June 1963.
(Reported in Avtomaticheskaya svarka, Kiev, No. 9, Sept 1963, pp 95-96 author,
V. R. Ryabov)
JPRS 24,651 19 May 64

L 14504-66	EWT(m)/EWP(v)/T/EWP(t)/EWP(k)/EWP(z)/EWP(b)	IJP(c)	JD/HM/HW
ACC NR: AP6003278	(N)	SOURCE CODE: UR/0135/66/000/001/0004/0007	
AUTHOR: Strizhevskaya, L. G. (Candidate of technical sciences); Starova, L. L.	28		
ORG: none	77		
TITLE: Fusion welding of certain heterogeneous metals	16		
SOURCE: Svarochnoye proizvodstvo, no. 1, 1966, 4-7	44	55	
TOPIC TAGS: arc welding, electron beam welding, refractory metal, heterogeneous metal, weld evaluation, sheet metal, weldability			
ABSTRACT: As part of research into the welding of heterogeneous metals, the authors experimented with the welding of sheet ¹ (1-2 mm thick) specimens of Fe + Ni? Ni + Pd, Ni + Cu, Ti + Zr, V + Nb, V + Ta, Nb + Ta. The welding regimes were adapted to the differences in the physical properties of the metals welded together, primarily as regards melting point and heat conduction, so that the greater part of the heat from the heat source was concentrated on the more high-melting or heat-conducting metal. Welding was performed by either the argon arc or the electron-beam technique. It was found that the differences in the structure and properties of these metals affect the nature of the crystallization of welded joints. Cu and Ni, in pure or alloyed form, as well as Ni and steel, can be satisfactorily welded by the argon arc method, while Ti,			
Card 1/2	UDC: 621.791:669.15-194		

L 14504-66

ACC NR: AP6003278

Zr, Nb, Ta and V in various paired combinations can be satisfactorily welded either by the argon arc or the electron-beam method. For the case of these combinations the weld metal represents mostly a mechanical mixture of solid solutions and has a distinctly heterogeneous structure (with nonuniform etchability and hardness) and consists of α' - and β -phases. A metallographic examination confirmed the absence of chemical phases in such welded joints. The greatest difficulties are encountered when welding together the metals with insignificant mutual solubility which form chemical compounds. Such metals, as a rule, belong in mutually remote groups of the periodic table. E.g. Fe (group VIII) + Ti (group IV), Al (group III) + Ti (group IV), Cu (group I) + Ti (group IV), Fe (group VIII) + Nb (group V); the welded joints thus obtained display a pronounced brittleness. Hence for these metals the following welding technique may be recommended: fusion of only one of the two metals being welded (usually the more high-melting metal); in this case electron-beam welding is optimal. Another workable technique in this case is to use an intermediate metal that welds satisfactorily with both of the metals being welded. Orig. art. has: 4 figures, 3 tables.

SUB CODE: 11, 13/ SUBM DATE: none/ ORIG REF: 000/ OTH REF: 000

BC

Card 2/2

"APPROVED FOR RELEASE: 08/26/2000

CIA-RDP86-00513R001653530001-7

✓ Magnesium casting alloy with a magnesium aluminum
base. N.M. Dibona, A. L. Johnson
U.S.S.R. 102,554 Inventor's
Certificate of Completion

APPROVED FOR RELEASE: 08/26/2000

CIA-RDP86-00513R001653530001-7"

YERMULOVICH, Ya.V., kand. med. nauk; STRIZHEVSKIY, A.N.

Recurrent goiter. Khirurgiia 40 no.7:114-116 Jl '64.

(MIRA 10:2)

1. Fakul'tetskaya khirurgicheskaya klinika (zav. - prof. Ya.M. Voloshin) Odesskogo gosudarstvennogo meditsinskogo instituta; khirurgicheskoye otdeleniye bol'nitsy (glavnnyy vrach A.N. Kopanov) Zhvotenevogo rayona Odessy i khirurgicheskoye otdeleniye (zav. - dotsent A.N. TSELLARIUS) Dorozhnoy bol'nitsy (nachal'nik - A.Kh. Filonov) Odessko-Kishinevskoy zheleznoy dorogi.

Methods of analysis of calcium carbide and acetylene

27

7

3

I. Strizhevskii. Zavodskaya Lab. 22, 1297-302(1956).—A review with 28 recent references. W. M. Sternberg.

4E41
4E5C
2 may

pm fra
MT

SPERBERKIV, B.Z.

Woodworking instruments and equipment at the Leipzig Fair
in 1965. Doc. from M.R.O. 070-31 0 165. (MFA 18702)

STRIZHEVSKIY, I., kandidat tekhnicheskikh nauk; TOMLYANOVICH, D.,
kandidat tekhnicheskikh nauk.

Protection of city underground metal pipelines from corrosion.
Zhil.-kom. khoz. 3 no.11:12-17 [N]'53. (MLRA 6:12)
(Pipelines) (Corrosion and anti-corrosives)

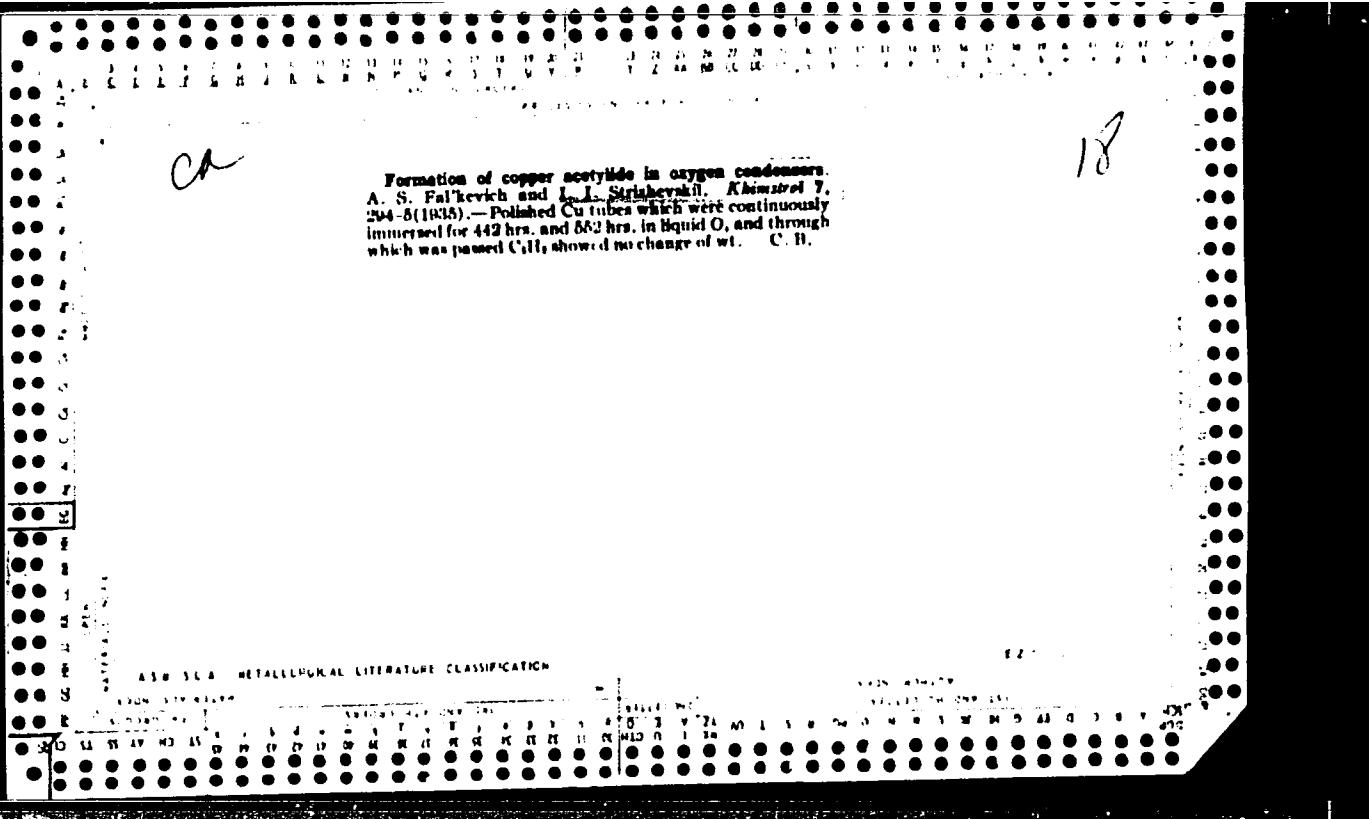
LOMANOVICH, V.; STRIZHEVSKIY, I.

Device for locating underground electric lines and pipelines.
Radio no.1:32-34 Ja '61. (MIRA 14:9)
(Electric lines--Underground)
(Electronic apparatus and appliances)

PHYSICAL AND PROPERTIES INDEX

CA

Rapid determination of cuprous and total copper in cuprammonium solution. I. I. Strizhevskii, *Zhurnal Lab.*, 4, 1120 (1935). - In the control of the compn. of cuprammonium soln. used in the absorption of CO from NH₃ mixt. in the production of NH₄, the following method gave accurate results. - Dil. 10 cc. of the soln. to 250 cc. To det. Cu⁺ introduce 25 cc. of the soln. into a mixt. of 15 cc. of 3 N H₂SO₄, with 15 cc. of the Brusius soln. (111 g. KSCN and 20 g. KI in 11. H₂O), and titrate the liberated I₂ with Na₂S₂O₃. To det. total Cu, acidify 25 cc. of the soln. with H₂SO₄, and oxidize the mixt. with 0.1 N KMnO₄, until the pptd. Cu⁺ is dissolved and an addnl. drop of KMnO₄ causes no change of color of the soln. Decompose the excess KMnO₄ with 1 drop of alk. soln. of C₂H₅K, add 15 cc. of the Brusius soln., and titrate with Na₂S₂O₃. Chas. Blum.



CH
7

Determination of silver by precipitation with acetylene
I. I. Strizhevskii. Zarodskaya Lab. S, 500 110960.
To a min. of 0.01 g. Ag in 25 cc. of weak HNO₃ soln. at
60° add 5 cc. of 50% tartaric acid and 10 cc. of NH₄OH
(1:0.90), and pass C₂H₂ (freed from H₂S and PH₃) for 15
min. Filter, wash the AgCl with water satd. with C₂H₂,
and boil it with the filter in 30 cc. of 25% HNO₃. Cool
the soln. and titrate with NH₄SCN by the Volhard method.
The detn. is impossible in the presence of Pb and Pd;
it is not affected by other cations. Chas. Blane

A3B-3A METALLURGICAL LITERATURE CLASSIFICATION

Detection and determination of sulfur traces in argon.
I. I. Strizhevskii and I. V. Korablev. *Zaridkaya Lab.* 5,
501-2(1980).--To det. S, a measured amt. of A-N
(300 ml.) is forced through a washing bottle contg. CS_2 .
The CS_2 is evapd. in a Pt dish on a water bath and the S
ignited. The difference in wt. of the Pt dish before and
after the ignition gives S. To det. $\text{SO}_2 + \text{SO}_3$, A-N is
passed through 1.5% H_2O_2 neutralized with 0.01 N
NaOH to methyl orange, and then titrated with 0.1 N
NaOH. To det. SO_3 , A-N is passed through H_2O_2 and
the H_2SO_4 is pptd. with BaCl_2 in HCl soln. To detect S,
 SO_2 and SO_3 , A-N and H are passed through the Dreh-
schmidt Pt capillary tube heated at 800° in an elec. furnace.
The outlet of the tube is connected with the stem of a
funnel immersed in 10% $\text{Pb}(\text{OAc})_2$. The formation of a
dark ppt. on the funnel (after 30 min. of passage) indi-
cates S. Chas. Blanc

co

Determination of acetylene in liquid air. L. M. Iof' son,
I. I. Strizhevskii and A. B. Bergelson. *Zavodskaya Lab.*
9, 632-3 (1936). Liquid air is evapd. in a modified app
(illustrated) of Chernyak and Strizhevskii (*C. A.* 30,
80739). The C_2H_2 is absorbed in a soln. of 25 g. HgI_2 and
30 g. KI in 100 cc. H_2O in the presence of solid KOH
(ref. Lebeau and Damiens, *C. A.* 7, 1469). The ppt. is
oxidized with HNO_3 and titrated with NH_4SCN by the
Volhard method. Chat. Blatt

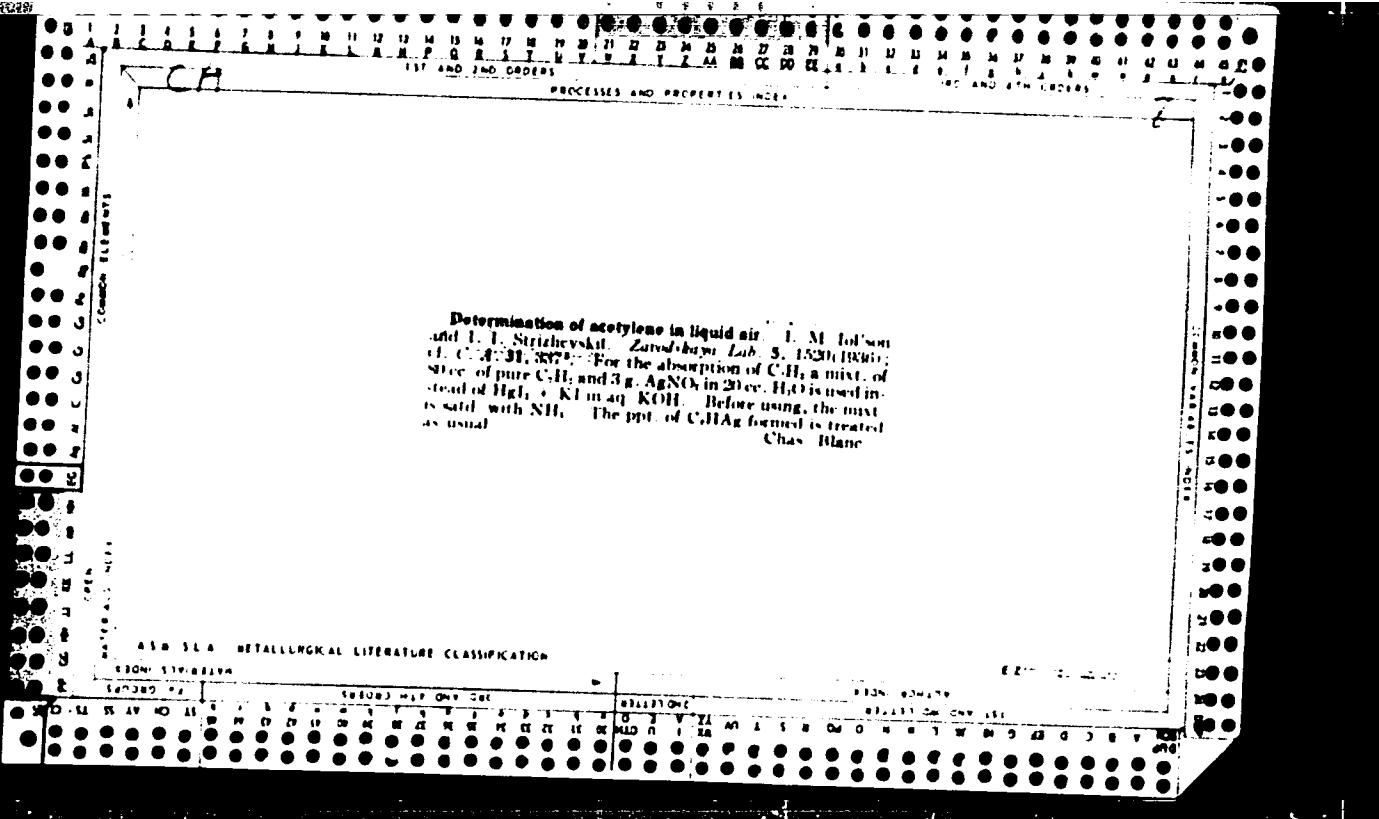
ASA-SLA METALLURGICAL LITERATURE CLASSIFICATION

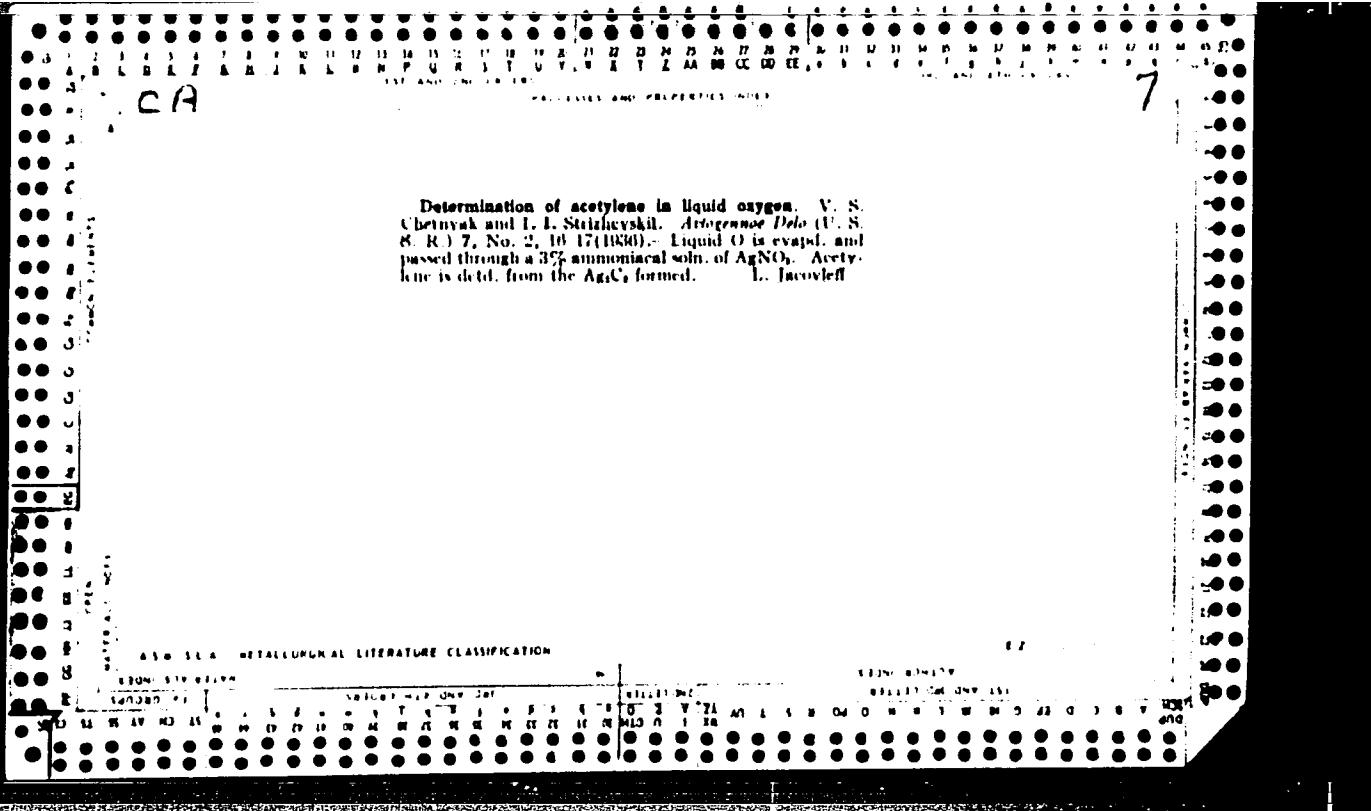
100-101-102-103

104-105-106-107

108-109-110

111-112-113-114



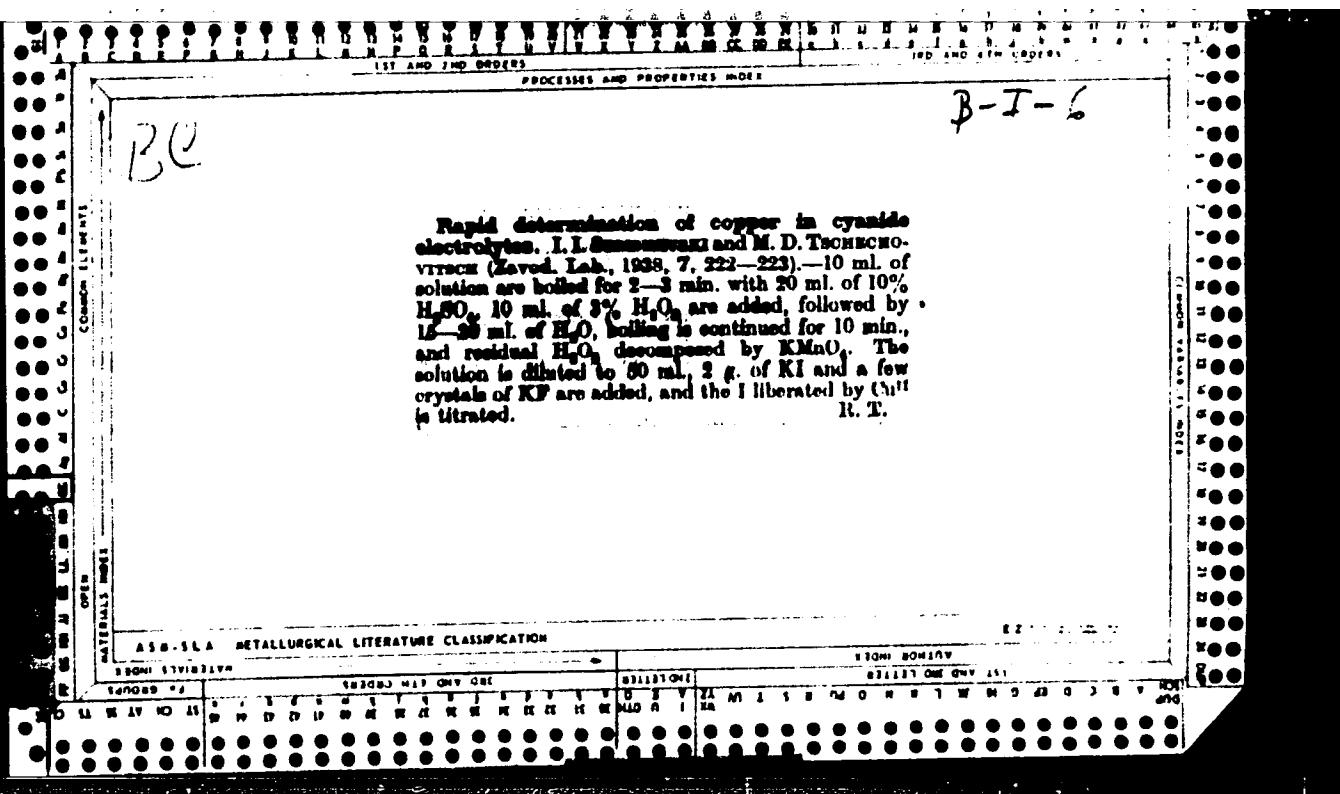


13c

Determination of copper in cuprous acetylide.
I. I. STRASHINSKI (J. Appl. Chem. Russ., 1937, 10,
562—564).—Cu₂C₂ (0.01—0.1 g.) is dissolved in 25 ml.
of 6N-HCl, excess of approx. 0.1N-KBrO₃ in 2% KBr
is added, the solution is boiled for 3—5 min., cooled,
2 ml. of 3% PhOH are added to remove Br, followed
after 3 min. by 5 ml. of 13.4% KCNS in 2% KI, and
the I liberated is titrated. R. T.

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

100-119-411A	200-309-411A	300-409-411A	400-509-411A	500-609-411A	600-709-411A	700-809-411A	800-909-411A	900-1000-411A
Y	Y	Y	Y	Y	Y	Y	Y	Y



Determination of moisture and carbon dioxide in air
previous to rectification. I. I. Strzhevskii. *Argonne
Dokl.* 9, No. 3, 40 (1938); *Chem. Zeit.* 1938, II, 3051.
The moisture is absorbed with H_2SO_4 (d. 1.84) and P_2O_5 .
The CO_2 is absorbed with ascarite.
M. G. Moore

Methods for combating acetylene dangers arising from the performance of air-rectification apparatus. J. I. Strizhevskii. Bull. Acad. sci. U. R. S. S. Ser. Tekhn. 1930, No. 3, 81-82; Khim. Referat. Zhur. 1930, No. 10, 138-9.—In the industrial production of O₂, N₂ and the noble gases by rectification of liquid air, explosions of the apparatus are frequent. These explosions are caused by the presence of acetylene in liquid O₂ and air. From data on the solv. of acetylene in O₂ and air, and from methods for the prevention of explosions S. concludes that no solution for the safe application of the rectifying app. has been found. One of the methods for preventing explosions consists of the removal of the liquid from the condenser in which considerable amounts of C₂H₂ accumulate. For this purpose it is necessary to conduct systematic analyses of liquid O₂ in the condenser for the presence of C₂H₂. A method for the detn. of C₂H₂ in liquid O₂ has been developed which is based on the condensation of C₂H₂ at 60°K.: Remove 250 cc. of liquid O₂ from the condenser to the evaporator, which is placed in a Dewar vessel. Connect the evaporator to the condenser (also immersed in a Dewar vessel with liquid O₂), remove the Dewar vessel from the evaporator and evap. the liquid for 35-40 min. After the evap., pass N through the system for 4-5 min. and freeze out C₂H₂ in the condenser. Connect 2 pipets with Glomay reagents (the 2nd pipet is a control) to the condenser and slowly remove the Dewar vessel from underneath the condenser. The C₂H₂ changes into the vapor state and is absorbed by the reagent, forming a colloidal soln. of Cu acetylene. Again pass N through the system, remove the soln. to a 30-cc. Egerz cylinder and detn. C₂H₂ calorimetrically. A method for the prepn. of acetylene water is given. This method permits detn. of up to 1.12 cc. of C₂H₂ per l. of liquid O₂.

W. R. Henn

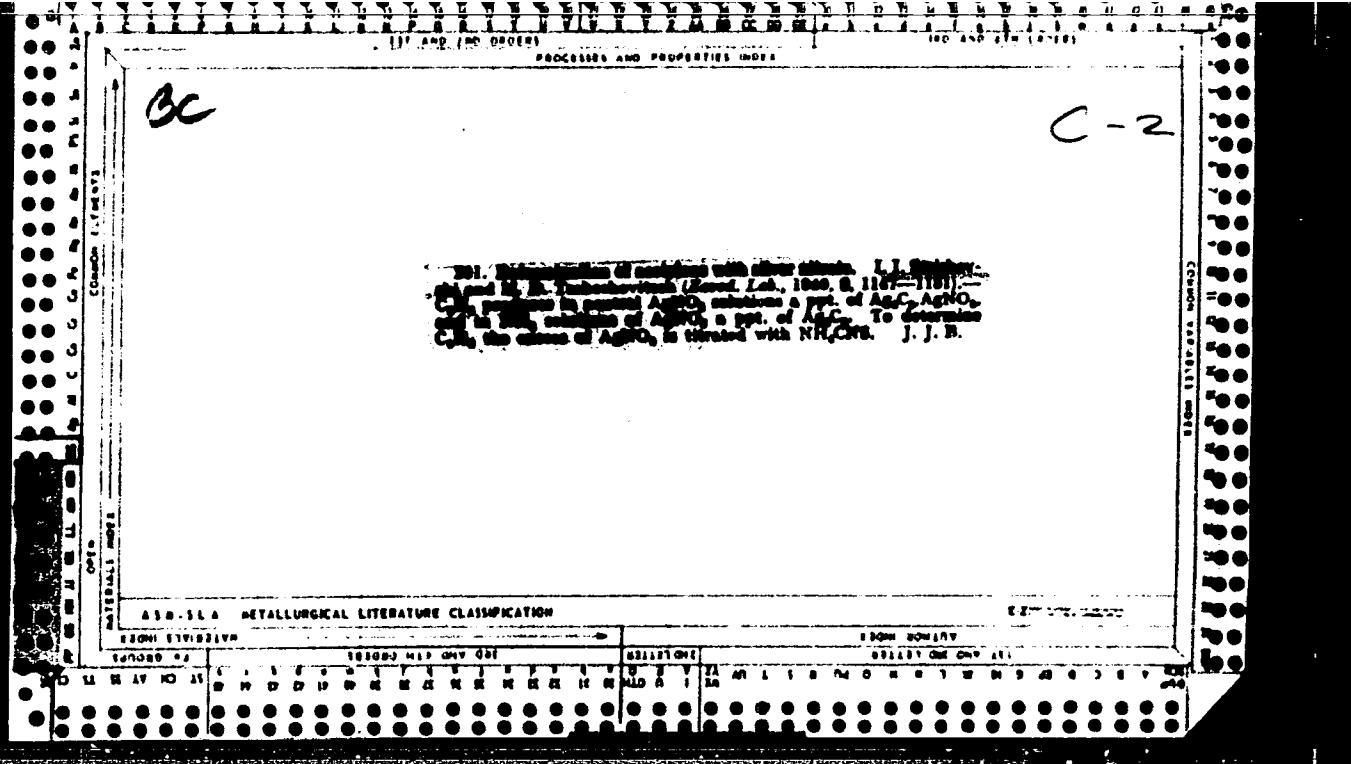
Analysis of acetylene. I. I. Serebryakov and M. D. Chekhovich. Zashchita i eksploatz. 1962, No. 10, p. 12-15. Papers are described on the analysis of C₂H₂ for H₂S and PH₃. The H₂S and PH₃ were detd. by absorption in NaOCl according to the Lange-Zedererantz method as modified by Frenkel. Air in the C₂H₂ was detd. by absorption in water, fuming H₂SO₄, and acetone-water mixtures. Absorption in water gave results which differed by not more than 0.1% from the H₂SO₄ method, while the results from the acetone-water method were much higher and in addition differed considerably among themselves. Yu. Z. Korch

ASTORIA METALLURGICAL LITERATURE CLASSIFICATION

PROCESSED AND PROTECTED BY
THE CIA

Determination of acetylene in liquid oxygen. I. I. S.
Struzhevskii. *Astrophys. Det.* 10, No. 9, 30-1 (1939);
Zhur. Zern. 1940, I, 129; cf. *C. A.* 34, 7657. - Liquid
O₂ evapd. in a special app. and the C₂H₂ swept out with a
stream of NH₃. The C₂H₂ is absorbed in 10 ml. of a re-
agent prep'd. by dissolving 1 g. Cu(NO₃)₂ in 10 ml. H₂O
by addn. of 4 ml. 20% NH₃, 3 g. NH₄OH-HCl and 6 ml.
3% gelatin and dilg. rapidly to 50 ml. with H₂O. The red-
dish violet color is compared colorimetrically with stand-
ards of known C₂H₂ content. If the C₂H₂ content is greater
than 1.12 ml./l. of O₂, the absorbent is prep'd. without the
gelatin, the ppt. filtered and detd. volumetrically or grav-
imetrically (*I. C. A.* 31, 6129). H. E. Wirth

Interferometric determination of the composition of argon-nitrogen-hydrogen mixture. I. S. Mirolyubskii and J. I. Struhovskii. *Zarubezh. Lit.* 9, 503 (1940). Detailed descriptions of procedures and app. The results compare favorably with those obtained by the chem. method. H. Z. Kampsch



Ca

Identification of butacetylene in the presence of acetylene.
 I. I. Strizhevskii and M. D. Chekhovich. *J. Gen. Chem. (U. S. S. R.)* **10**, 1303-4 (1940).—The detection of butacetylene (I) in the presence of acetylene (II) is of practical interest for the control of the purity of gases obtained in the cracking of satd. hydrocarbons to yield II. The present method is based on the great difference in velocity with which I and II react with an ammoniacal soln. of CuSO_4 . I yields immediately a dark-brown ppt. whereas II gives a ppt. only after a considerable length of time. I is prep'd by dissolving 20 g. CuCl in a concd. soln. of $(\text{NH}_4)_2\text{CO}_3$ while adding a small amt. of NH_3 , passing II into the soln., washing the CuC_2CCu with the exclusion of air until free from NH_3 , and oxidizing it with 300 g. CuCl in twice the amt. of water for 3 hrs. on the water bath. CuCl is decanted off, and the reaction product is kept for 4-5 days in the air. CuC_2CCu is decompd. by boiling with excess 2% HCl and I is absorbed in H_2O at 0°. I is detd. in its aq. soln. by pptn. with a 2% ammoniacal soln. of CuSO_4 . The ppt. is washed with a 3% soln. of NH_3 until the filtrate gives no reaction for Cu, dissolved in H_2SO_4 , and completely oxidized with permanganate while boiling. MnO_4^- is reduced with H_2O_2 , and Cu detd. iodometrically after prolonged boiling
 Gertrude Berend

ASH-SLA METALLURGICAL LITERATURE CLASSIFICATION

E27-12-12-1

E27-12-12-1

E27-12-12-1

E27-12-12-1

6
5
4
3
2
1
La
PROCESSED AND PROPERTY OF THE
CIA LIBRARIES

11A
New solvents for C_2H_2 . J. I. Strizhevskii and M. D. Chekhovich. *J. Chem. Ind. (U.S.S.R.)* 18, No. 19, 23 (1941). - MeOAc or mixts. of MeOAc and $MgCO$ contg. activated C can replace pure $MgCO$ for dissolving C_2H_2 . The C_2H_2 should be dried over $CuCl$ to prevent possible hydrolysis of MeOAc. H. M. Leicester

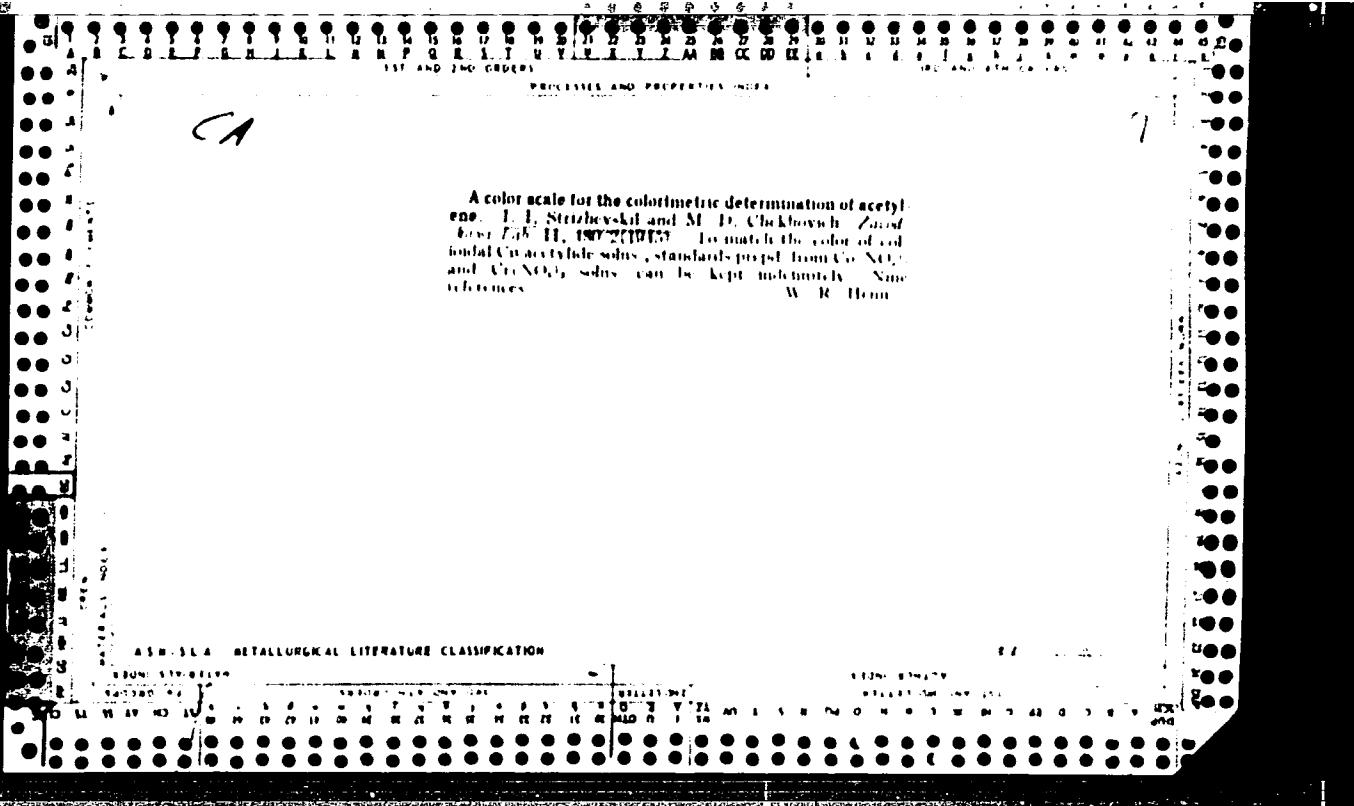
AIR-SLA METALLURGICAL LITERATURE CLASSIFICATION

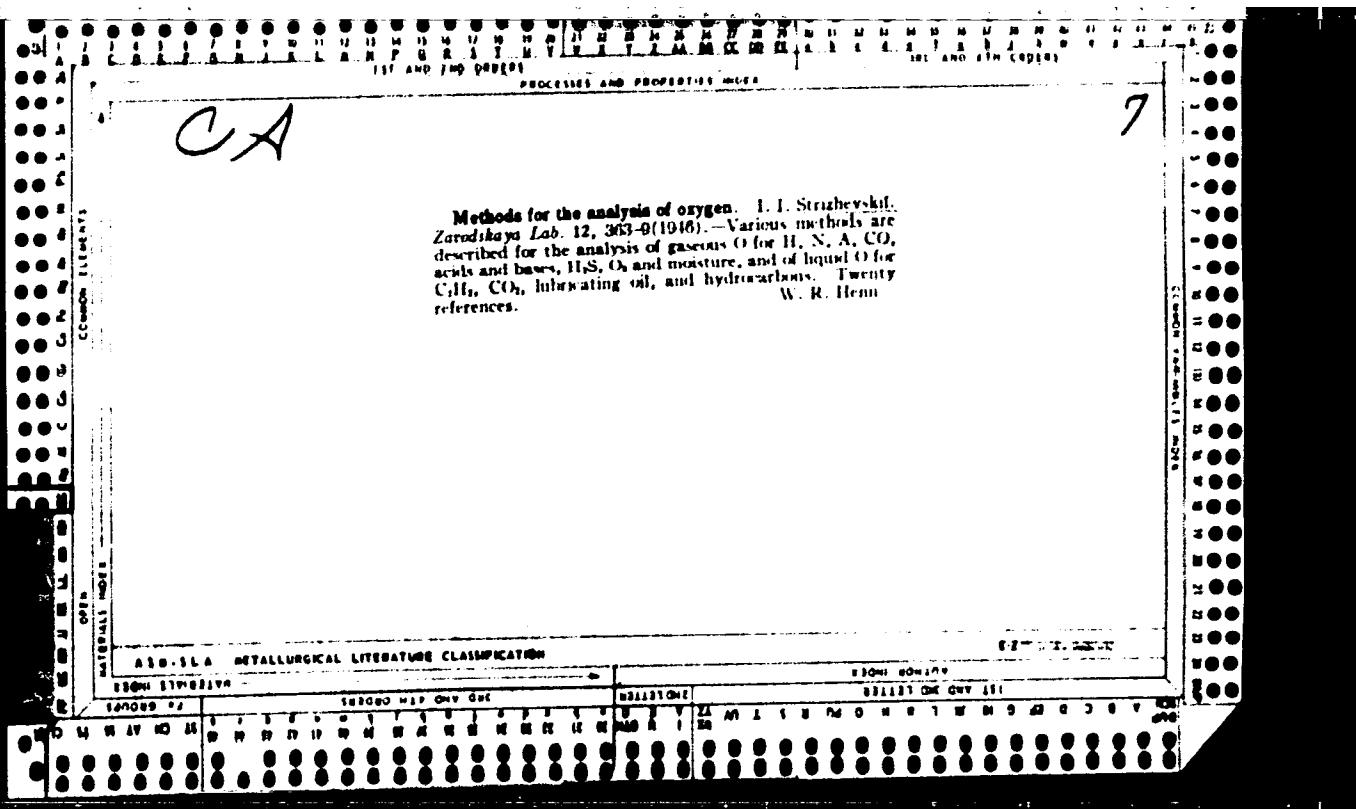
SEARCHED _____

INDEXED _____

SERIALIZED _____

FILED _____





Methods for Analysis of Argon (In Russian). 1-1
Spirzhevskii. *Kislorod (Oxygen)*, v. 4, Nov. Dec.
1947, p. 33-43.
Reviews the various gravimetric, colorimetric,
and spectrometric methods. 17 ref.

ASIA - METALLURGICAL LITERATURE CLASSIFICATION

13

13

*267 Method of Determination of Acetylene in Liquid Oxygen and Air. (In Russian). I. I. Strizhevskii
Kislorod (Oxygen), 4th yr., Jan.-Feb. 1947, p. 48-52

Following a detailed description of methods reported in the foreign literature, the modifications worked out by the author are described in detail. Includes a method for acetylene and also one for acetylene and total hydrocarbons (based on methane).

F

2002. NEW METHODS FOR ANALYSIS OF CALCIUM CARBIDE AND ACETYLENE.
Strizhevskii, I.I. (Factory Lab., (U.S.S.R.), May 1947,
13, 671-576). Reviews methods for determination of amount
of acetylene evolved from a given weight of carbide;
phosphorus and sulphur impurities in acetylene; air in
acetylene; and moisture in acetylene.

P.L.R.

AMSLA METALLURGICAL LITERATURE CLASSIFICATION

PA 20/49T43

STRIZHEVSKIY, I. I.

Sep 48

USSR/Engineering
Pipe Lines
Welding, Equipment

"High-Pressure Acetylene Pipes," S. G. Guzov, Engr,
I. I. Strizhevskiy, Cand Chem Sci, All-Union Sci Res
Inst of Autogenous Welding, 3½ pp

"Avtogennoye Delo" No 9

Many acetylene generators working under pressure of
1.5 ats have recently been produced. This article
is published in interest of accident prevention.
Treats subject under: (1) acetylene explosions and
their causes, (2) detonation, (3) catalysts, (4)
copper acetylenide, (5) formation of crystallohydrates,
and (6) conclusions.

20/49T43

STRIKHEVSKIY, I. I.

PA 61T32

USSR/Engineering
Acetylene - Detection
Gas Analysis

Jan 1948

"New Methods for the Determination of Acetylene in Gaseous Mixtures and in Air," I. I. Strizhevskiy, Inst Autogenous Processing of Metals, 8 pp

"Zavod Labor" Vol XIV, No 1

Presents important contributions of Soviet scientists with respect to manufacture and determination of acetylene in gaseous mixtures and air. Increase in use of acetylene, by various branches of mechanics, demands greater production and makes new requirements for methods of determination of this gas. Soviet scientists have done much to supply various deficiencies. [redacted]

61T32

STRIZHEVSKIY, I.I.

Removal of hydrogen phosphide from acetylene. Patent U.S.S.R. 76,999, Dec.
31, 1949.
(CA 47 no.20:10815 '53)

ДИПЛОМАТИЧЕСКИЙ, Т. Т.

27766. ДИПЛОМАТИЧЕСКИЙ, Т. Т.--Khruščat'xnyy tere-liechenko vlyadny tri svjete
malou-teroristicheskoy stali, tru y po avtora, svarka red. flyumon (In-t elektrosvarki im.
pet. a), si. 7, 1949, s. 3-12
--drovni stacharste na rostvorennyy atsetilen.--
Spp. 27'69.

So: Letopis' Zhurnal'nykh Statey Vol. 37, 1949.

STRIZHEVSKIY, I. I.

PA 1/50T13

USSR/Chemistry - Acetylene
Engineering - Acetylene

Sep 49

"The New Standard for Dissolved Acetylene,"
I. I. Strizhevskiy, Cand Chem Sci, S. G. Guzov,
Engr, VNIIAVTOGEN, 2 $\frac{1}{2}$ pp

"Avtogen Delo" No 9

Institute has worked out new specification for
"acetylene, dissolved, commercial" to replace
OSR 17421-39. Explains reasons for alterations
and additions to regulations, with two tables,
and three diagrams.

1/50T13

Purification of acetylene by "Geratol." I. I. Strizhevskii. *Zavodskaya Lab.* 13, 1133(1949). Infusorial earth (2-3 mm. grains) is satd. with $K_2Cr_2O_7$ soln. in aq H_2SO_4 . The product contains 11.13% CrO_3 and 0.18% H_2SO_4 . Passage of crude C_2H_2 over this prepn. completely removes PH_3 and H_2S . G. M. Kosolapoff

STRIZHEVSKIY, I. I. and GUYEYOV, S. G.

Atsetilenovye Stantsii (Acetylene Generation Stations), 294 p., Moscow, 1950.

STRIZHEVSKYI, I. I.

158T36

USSR/Engineering - Ceramic Materials

Welding, Equipment

Apr 50

"New Acetylene Safety Locks," I. I. Strizhevskiy, G. N. Dmitriyev, All-Union Sci Res Inst of Autogenous Welding, 1^{1/2} pp

"Avtogen Delo" No 4

Describes two types of locks for preventing backflush in injecting burners and cutters: water-close type lock, and more dependable dry safety lock, -construction of which is based on using special porous material. Basic materials for porous ceramics are crushed chamotte and liquid glass. After numerous experiments with samples of porous ceramics prepared under various

158T36

USSR/Engineering - Ceramic Materials
(Contd)

Apr 50

conditions and various component ratios, composition and manufacturing method were developed for ceramic material which satisfies requirements for dependable dry locks.

158T36

The decomposition of calcium carbide by water 1-1
Slobozhenskii, A. S. Zaitseva, and M. M. Shelevchuk - *Izv. Akad. Nauk SSSR, Tekhnicheskaya Kemiya*, No. 3, 12-18 (1951). The rate of decomprn. of CaC₂ in H₂O was detd. calorimetrically relative to (a) the size of the particles of CaC₂, (b) initial temp. of H₂O, (c) ratio of CaC₂ to H₂O, (d) sludge content in the H₂O, and (e) the agitation. The quantity of CaC₂ used in each expt. depended on the particle size and the H₂O ratio and amounted to 0.6 to 1 kg. Parallel expts. were made using sludges contg. 10 or 20% Ca(OH)₂ in place of the H₂O. The results are tabulated. In order to calc. the productivity of a CaC₂ generator a carbide consumption of q kg/hr is assumed, and the infinitesimal consumption is $q dt$. The total consumption is expressed by the integral

$Q = \int r q dt$, where $r = G/G_0$ (the ratio of amt. of carbide used to the amt. fed to the generator) and $T =$ time of complete consumption of the carbide. r also is $[(T - t)/(T - T_0)]^p$, where p is a function of the rate of decomprn. of the carbide. Substituting this value for r and integrating gives $Q = qT_0 (\rho - 1)$ when $\rho = (1 - T)/(T - 1)$. At a starting temp. of 15°C, the values for ρ relative to the particle size of the carbide fed are 0.80, 2.80, 25.80, 4, 16.25, 4.85, 8.15, 4.7; and 2.8, 0.7.

Paul W. Howerton

V(NII) Avtognan

STRIZHEVSKIY, I.

GUZOV, S. G. *STRIZHEVSKIY, I. I.*

Strizhevskiy, I. I.

Comments on S. G. Guzov's and I. I. Strizhevskiy's book "Safety technique in gas welding and cutting of metals." Eng. L.I. Levrov. Avtorg. delo 23 no. 7, 1952.

Monthly List of Russian Accessions, Library of Congress. November 1952.

UNCLASSIFIED.

STRIZHEVSKIY, I.I., kandidat khimicheskikh nauk; KOVAL'SKIY, V.A., inzhener;
SHASHKOV, A.N., kandidat tekhnicheskikh nauk, redaktor; MATVEYEVA, L.S.,
redaktor.

[Operation of portable acetylene generators] Eksploatatsiya perenosnykh
atselilenevykh generatorov. Moskva, Gos.nauchno-tekhn.izd-vo mashinostreit.
let-ry, 1955. 71 p. (Rukovodящie materialy po gazoplamennoi obrabotke
metallov, no.8). (MLRA 9:9)

(Acetylene generators)

STRUBINSKY, I. I.

2
I-4E 4A
I-4E 2C

Hold over of carbon-14 carbide. I. I. Strubinsky,
Trudy Nauk. Soversh. Akademii Nauk. Atomm. Obrab.
Promst. 1955, No. 2, 111 et seq. Rjeval' Zhar, Khim.
1956, Akad. Nauk. SSSR. During the dry hydrolysis of CaC_2 ,
the heat evolved during the reaction is carried off by the
boiling water vapor or the excess water. The heat and ma-

tural losses of the CO_2 generator and the generator car-
ried over are small. It was found that 35% of the heat of the reaction is lost due to the transfer of heat to the
boiling water vapor or the excess water. The remaining heat is
carried off by the excess water.

The heat of the reaction is carried off by the excess water
and the heat of the reaction is carried off by the excess water.

The heat of the reaction is carried off by the excess water.

The heat of the reaction is carried off by the excess water.

The heat of the reaction is carried off by the excess water.

The heat of the reaction is carried off by the excess water.

The heat of the reaction is carried off by the excess water.

The heat of the reaction is carried off by the excess water.

The heat of the reaction is carried off by the excess water.

The heat of the reaction is carried off by the excess water.

The heat of the reaction is carried off by the excess water.

The heat of the reaction is carried off by the excess water.

The heat of the reaction is carried off by the excess water.

The heat of the reaction is carried off by the excess water.

The heat of the reaction is carried off by the excess water.

The heat of the reaction is carried off by the excess water.

The heat of the reaction is carried off by the excess water.

The heat of the reaction is carried off by the excess water.

The heat of the reaction is carried off by the excess water.

The heat of the reaction is carried off by the excess water.

The heat of the reaction is carried off by the excess water.

The heat of the reaction is carried off by the excess water.

The heat of the reaction is carried off by the excess water.

The heat of the reaction is carried off by the excess water.

The heat of the reaction is carried off by the excess water.

The heat of the reaction is carried off by the excess water.

The heat of the reaction is carried off by the excess water.

The heat of the reaction is carried off by the excess water.

The heat of the reaction is carried off by the excess water.

The heat of the reaction is carried off by the excess water.

The heat of the reaction is carried off by the excess water.

The heat of the reaction is carried off by the excess water.

The heat of the reaction is carried off by the excess water.

The heat of the reaction is carried off by the excess water.

The heat of the reaction is carried off by the excess water.

The heat of the reaction is carried off by the excess water.

The heat of the reaction is carried off by the excess water.

The heat of the reaction is carried off by the excess water.

The heat of the reaction is carried off by the excess water.

The heat of the reaction is carried off by the excess water.

The heat of the reaction is carried off by the excess water.

The heat of the reaction is carried off by the excess water.

The heat of the reaction is carried off by the excess water.

The heat of the reaction is carried off by the excess water.

The heat of the reaction is carried off by the excess water.

The heat of the reaction is carried off by the excess water.

The heat of the reaction is carried off by the excess water.

The heat of the reaction is carried off by the excess water.

The heat of the reaction is carried off by the excess water.

The heat of the reaction is carried off by the excess water.

The heat of the reaction is carried off by the excess water.

STRIZHEVSKIY, I.I.; STREBULAYEVA, Ye.N.

Acetylene content in carbide silt. Trudy VNIILavtogen no.3:211-214
'55. (MIRA 11:12)
(Acetylene) (Carbides)

Chemistry - Acetylene

FD-2528

Date 1/11 Pub. 50 - 7/14

Authors : Shashkov, A. N., Strizhevskiy, I. I., Ol'kovskiy, V. F.,
Matveyev, N. N.

Title : Improvement of efficiency and increased automatization in the
operation of acetylene-filling equipment

Periodical : Khim. prom. No 4, 222-227, Jun 1955

Abstract : Describe the design and operation of small units installed at
consumer plants and used for the production from calcium carbide
of dissolved acetylene filled into cylinders. Various improve-
ments in the design and operation of the generator and compressor
are described. Power to the carbide feed is furnished by an en-
gine of the membrane type activated by water or gas (e. g. com-
pressed air). By this means the danger of explosions is reduced.
Four figures, 2 graphs, 5 tables.

Institution : All-Union Scientific Research Institute of the Autogenous
Working of Metals (VNIIAVTOGEN)

8
FBI Lab - File # 11944-A-1-1-1-1-1-1
8

The Bureau has been advised by the FBI Laboratory that the photograph enclosed in this memorandum was taken from an internal security system at the Bureau's Washington, D.C. Headquarters. The photograph was taken by the Bureau's Criminal Laboratory on April 25, 1988. The photograph depicts a portion of the interior of a room, showing a white wall and a door. The photograph is oriented horizontally and is slightly faded.

AB
MT

137-58-2-3255

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 2, p 143 (USSR)

AUTHOR: Strizhevskiy, I.I.

TITLE: New Equipment for Making Dissolved Acetylene (Novoye oborudovaniye dlya proizvodstva rastvorenного ацетилена)

PERIODICAL: V sb. 'Gazoplamen. obrabotka metallov. Moscow, Mashgiz, 1956, pp 140-143

ABSTRACT: Bibliographic entry

1. Acetylenes--Production--Bibliography

Card 1/1

137-58-2-3254

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 2, p 143 (USSR)

AUTHOR: Strizhevskiy, I.I.

TITLE: New Designs of Acetylene Generators (Novyye konstruktsii
atsetilenovykh generatorov)

PERIODICAL: V sb.: Gazoplamen. obrabotka metallov. Moscow, Mashgiz,
1956, pp 152-160

ABSTRACT: Bibliographic entry

1. Acetylene generators--Design--Bibliography

Card 1/1

STRIZHEVSKIY, I.I.

Determination of phosphine in acetylene. I. I. Strizhevskiy and V. P. Zil'seva. *Zavodskaya Lab.* 22, 516-7 (1938); cf. Racine, C.R. 46, 44254; Anon., *J. l'Acetylene*, No. 105, 45 (1937).—The detn. of PH₃ with HgSO₄ gives results which agree with those of photometric methods (oxidation and detn. of yellow complex) within 0.003%. The C₂H₂-PH₃ sample is passed into a test tube contg. 10 ml. reagent soln. (prepd. from 15 g. KCl in 200 ml. H₂O and 10.0264 g. HgSO₄) until PH₃ begins to escape from the exit tube (test with AgNO₃, yielding a Ag ppt.). The content of PH₃ is given by %PH₃ = 0.251/V, where V is the gas sample vol. in l. under standard conditions. G. M. K.

USSR/ Analytical Chemistry. Analysis of Inorganic Substances.

G-2

Abs Jour: Referat. Zhur.-Khimiay, No. 8, 1957, 27229.

Author : I.I. Strizhevskiy.

Title : Methods of Analysis of Calcium Carbide and Acetylene. (Review).

Orig Pub: Zavod. laboratoriya, 1956, 22, No. 11, 1297 - 1302.

Abstract: Bibliography with 28 titles.

Card 1/1

ANTONOV, I.A., kand.tekhn.nauk; ANTOSHIN, Ye.V., inzh.; ASINOVSKAYA, G.A., inzh.; VASIL'YEV, K.V., kand.tekhn.nauk; GUZOV, S.G., inzh.; DEYKUN, V.K., inzh.; ZAYTSEVA, V.P., inzh.; KAZHEKOV, P.P., inzh.; KARAN, Yu.B., inzh.; KOLTUNOV, P.S., kand.tekhn.nauk; KOROVIN, A.I., inzh.; KRZHECHKOVSKIY, A.K., inzh.; KUZNETSOVA, Ye.I., inzh.; MATVEYEV, N.N., tekhnik; MOROZOV, M.Ye., inzh.; NEKRASOV, Yu.I., inzh.; NECHAYEV, V.D., kand.tekhn.nauk; NINEBURG, A.K., kand.tekhn.nauk; SPEKTOR, O.Sh., inzh.; STRIZHEVSKIY, I.I., kand.khim.nauk; TESMENITSKIY, D.I., inzh.; KHROMOVA, TS.S., inzh.; TSEUNEL', A.K., Inzh.; SHASHKOV, A.N., kand. tekhn.nauk, dots.; SHELECHNIK, M.M., inzh.; SHUKHMAN, D.Ya., inzh.; EDEL'SON, A.M., inzh.; VOLODIN, V.A., red.; UVAROVA, A.F., tekhn.red.

[Machines and apparatuses designed by the All-Union Institute of Autogenous Working of Metals] Mashiny i apparty konstruktsii VNIIAvtogen. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroitel'noi lit-ry, 1957. 173 p. (Moscow. Vsesoiuznyi nauchno-issledovatel'skii institut avtogennoi obrabotki metallov, no.9)

(Gas welding and cutting--Equipment and supplies)

STRIZHEVSKIY, I.I., kand.khim.nauk

Water content in acetylene cylinders. Trudy VNIIAvtogen no.4:137-146
'57.
(Acetylene generators)

STRIZHEVSKIY, I.I., kand.khim.nauk; ZAYTSEVA, V.P., inzh.

Rapid method of air determination in acetylene. Trudy VIII Avtogen
no.4:156-160 '57. (MIRA 10:12)
(Acetylene--Testing)

STRIZHEVSKIY, Iosif Isaakovich; RAGAZINA, M.F., inzh., ved. red.;
SHTERLING, S.Z., dots., red.; SOROKINA, T.M., tekhn.red.

[Operation of acetylene generators and water seals during
winter] Ekspluatatsiia atsetilenovykh generatorov i vodianykh
zatvorov v zimnee vremia. Moskva, Filial Vses. in-ta
nauchn. i tekhn. informatsii, 1958. 15 p. (Peredovoi
nauchno-tehnicheskii i proizvodstvennyi optyt. Tema 12.
(MIRA 16:3)
No. M-58-114/10)
(Acetylene generators—Cold weather operation)

ASINOVSKAYA, Gnesya Abramovna; STRIZHEVSKIY, Iosif Isaakovich;
ZELIKOVSKAYA, Natal'ya Mikhaylovna; ZAYTSEVA, Vera Polikarpovna;
RAGAZINA, M.F., inzh., ved. red.; SHTERLINE, S.Z., dots., red.;
SOROKINA, T.M., tekhn. red.

[BM-1 gas-like flux for nonferrous metal welding and brazing]
Gazoobraznyi flius BM-1 dlja svarki tsvetnykh metallov i tverdoi
paiki. Moskva, Filial Vses. in-ta nauchn. i tekhn. informatsii,
1958. 16 p. (Perevodoi nauchno-tehnicheskii i proizvodstven-
nyi opyt. Tema 12. No.M-58-104/0) (MIRA 16:3)
(Flux (Metallurgy)) (Nonferrous metals--Welding)

STRIZHEVSKIY, I.I., kand.khim.nauk; GUZOV, S.G., inzh.; SHASHKOV, A.N., kand.
tekhn.nauk, red.; KOVAL'SKIY, V.A., inzh., red.; TIKHANOV, A.Ya.,
tekhn.red.

[Production of acetylene used in gas welding and cutting]
Proizvodstvo atsetilena dlja gozoplamennoi obrabotki metallov.
Moskva, Gos. nauchn.-tekhn. izd-vo mashinostroit. lit-ry, 1958.
87p. (Spravochnye materialy po gazoplamennoi obrabotke metallov,
no.14) (MIRA 11:12)

(Acetylene generators)

STRIZHEVSKIY, I.I., kand.khim.nauk.; TESMENITSKIY, D.I., inzh.

Using finely granulated calcium carbide in acetylene generators.
Svar. proizv. no.1:36-38 Ja '58. (MIRA 11:1)

1.Vsesoyuznyy nauchno-issledovatel'skiy institut avotgennoy
obrabotki metallov.
(Calcium carbide)
(Acetylene generators)

WV-17-564.11/10

AUTHOR: Levchenko, I., "Candidate of Chemical Sciences, and
Koval'chik V.A. Engineer

TITLE: Acetylene Generators for Processing Fine Carbide and Carbide
Dust (Acetilenovye generatory dlya pererabotki karbida
i tselya i pyli)

PUBLISHER: "Vuzochnaya promsvistvo. 1958, no 72-33 (USSR)

ABSTRACT: Information is presented on design of new generators for pro-
cessing fine-granulated carbide, developed at VNIITverogen;
1) "PG-35" (Figure 1) of medium pressure and discontinuous
action for 1/8 granulation; 2) "MK" for fine and coarse
carbides; 3) "PG-36" (Figure 4) for processing carbide dust;
4) "TNE-35" for carbide of 2 to 80 mm granulation. 5) stationary
"AGS" generator with an additional device for flooding fine
carbide and dust by vortex water motion. The enumerated
generators ensure safe work processes. There are 8 diagrams

ASSOCIATION: VNIITverogen

1. Gas generating systems--Design 2. Acetylenes--Production
3. Carbides--Applications

Card 1/1

135-55-1-15/23

AUTHOR: Strizhevskiy, I.I., Candidate of Chemical Sciences and
Tasmeritskiy, D.I., Engineer

TITLE: Utilization of Fine Calcium Carbide in Acetylene Generators
(Ispol'zovaniye melkogo karbida kal'tsiya v atsetilenovykh
generatorakh)

PERIODICAL: Svarochnoye Proizvodstvo, 1956, Nr 1, pp 36 - 38 (USSR)

ABSTRACT: In the water-decomposition of fine granulated calcium carbide (in acetylene generators) special safety measures have to be observed. An increased amount of dust, which cannot always be completely eliminated, brings a dangerous factor into the treatment of fine carbide by generators in systems such as "water on carbide" and "displacement of water". The rate of interaction of carbide and water can be considerably reduced, if the surface of fine carbide parts is covered by a layer of oil product. Heavy oil products, particularly mazout, are preferably used. Figure 1 gives data on rates of carbide decomposition, from which it can be seen that the decomposition of carbide, which was not mixed with mazout, takes 5.5 minutes at an initial water temperature of 19° C. The decomposition times of carbide mixed with 3 and 5 % of mazout are 11 and 20.5 min. respectively.

Card 1/2

Utilization of Fine Calcium Carbide in Acetylene Generators 135-58-1-15/23

Data on decomposition rates of 5/15 granulated carbide, are given in Figure 2. The author concludes that calcium carbide with a 2/3 and 3/15 granulation, mixed with 5% dry masout can safely be used in generators of the following types: LG, GIV-1.25, GVR-1.25, GVA-3, STVE, GK-10 and the rated capacity of these generators is ensured. A filter must be placed before the water seal containing 10 to 25 mm granulated coke. The holding capacity of the filter must not be below 0.35 ltr per 1 cubic meter of the generator output per hour. The carbide charge must be reduced by 25% compared with the standard charge. There are 2 tables and 2 diagrams.

ASSOCIATION: VNIILavtogen

AVAILABLE: Library of Congress

Card 2/2 1. Generators (Acetylene) 2. Calcium carbide-Applications

STRIZHEVSKIY, I.I.

AUTHOR: Strizhevskiy, I.I., Candidate of Chemical Sciences 507/64-58-4-8/20

TITLE: The Properties of Liquid and Solid Acetylene (Svoystva zhidkogo i tverdogo etsetilena)

PERIODICAL: Khimicheskaya promyshlennost', 1958, Nr 4, pp. 221 - 227 (USSR)

ABSTRACT: There are, at present, two kinds of acetylene transport - in dissolved state at a pressure up to 25 atmospheres, and as calcium carbide - with the possibilities of transport not having been worked out yet. In dealing with the problem of the pressure of saturated acetylene vapors the author mentions in the beginning the papers by Ansdell (Ref 4), Cailletet (Ref 5), Villard (Ref 6), Willson and Suchert (Ref 7) as well as by Kuenen (Ref 8), the manual by D'Ans and Lax (Ref 9), Funk (Ref 14), Edminster (Ref 13) and Kordes (Ref 15), and compares them with each other. The property of substances to show a drop of the melting point on the addition of other substances can also be made use of with acetylene; carbon dioxide, ethane, propane, benzene, acetone, ether and other organic compounds can be used. The experiments carried out with the system acetylene-carbon dioxide showed that a high

Card 1/3

The Properties of Liquid and Solid Acetylene

SOV/64-58-4-8/2o

boiling azeotropic mixture is formed with a deviation from Raoult's (Raul) law taking place. The system acetylene-ethane forms low boiling azeotropic mixtures; the values obtained by the author agreed with those by McMillan (Ref 16) and the deviation from Raoult's law is highly positive. In the acetylene-ethylene system the behaviour of an ideal mixture as compared to the equilibrium composition liquid-vapor was observed. However, solid solutions are formed which leads to a shifting of the equilibrium curves. The investigations carried out by McCurdy and Katz (Ref 19) are also mentioned; in the system acetylene-acetone the presence of two complex solid phases is assumed. In connection with the explosive properties of liquid and solid acetylene the data and experiments by Buccar (Ref 20), Claude (Ref 21), Krauss (Ref 22), Clark (Ref 3), Kammermeyer (Ref 23), Rimarski and Metz (Ref 25), as well as by Sugawara (Ref 26) are mentioned and explained. Then the author states that possibilities of transporting calcium carbide can correspond to those of transporting liquid and solid acetylene; in connection with the problem of their transport experimental results obtained by Gashe (Ref 31), Yu.V.Dalego and G.F.Chepelyugin, as well as Mitsgier (Ref 34) are explained.

Card 2/3

The Properties of Liquid and Solid Acetylene

SOV/64-58-4-6/26

The transport of liquid and solid acetylene is to take place under conditions where an increase of pressure in the vessel is excluded, as the main danger for an explosion is to be found in the compressed gaseous acetylene. There are 8 figures, 4 tables, and 36 references, 2 of which are Soviet.

1. Acetylenes--Properties 2 Acetylenes--Transportation

Card 3/3

25(1) PHASE I BOOK EXP-JOITATION Sov/2/281
 Vsesopuznyy nauchno-issledovatel'skiy institut avtogennoy obrabotki metallov
 Kirovodnaya rechka 1, Savarka (Oxygen Cutting and Welding) Moscow,
 Mashir, 1959, 268 p. (Series: Ite: Trudy, vyp. 5)
 Slip printed. 4,800 copies printed.

Ed.: A.N. Shestkov, Candidate of Technical Sciences; Ed. of Publishing House: O.N. Soboleva; Tech. Ed.: V.D. Elk'inskiy;
 Goldin, Sc. for Literature on Heavy Machine Building; S. Ya. Golobin, Engineer.

PURPOSE: This collection of articles is intended for engineers, technicians, scientists, designers, and students of universities. The book may be used for improving operational methods of oxygen and gas metallworking.

COVERAGE: This book contains articles on theoretical investigations of oxygen cutting and welding and problems related to the gas-flame treatment of metals. No personalities are mentioned. References follow each article.

TABLE OF CONTENTS:

Strizhevskiy, I.I., and V.P. Zaytseva, Stabilizing Acetylene	229
<u>The authors investigate the stabilizing effect of nitrogen, methane, and commercial propane on the explosive decomposition of acetylene under pressure of 5 to 20 atm.</u>	
INFORMATION	
Vasili'ev, K.V. [Candidate of Technical Sciences]. New Method of Oxygen-Arc Cutting of Steel	245
The author describes an experimental investigation of the above process and stresses its advantages.	
Mekrakov, Yu. I. [Engineer]. New Torch for Kerosene-Oxygen Metal Cutting With Atomized Fuel (RKh-3-57)	249
The article contains a description of the torch, its uses, and its performance.	
Golubeva, Z.N. [Engineer]. Increasing Productivity of the Gas Welding Process	252
The author describes an oxyacetylene method of welding low-carbon steels. This method involves an increased oxygen-acetylene ratio and employs the SY-005 welding rod, developed by VNI Avtogen.	
Strizhevskiy, I.I. and D.I. Tsemennitskiy [Engineers]. Using Fine-Grained Calcium Carbide in a Mixture With Fuel-Oil	256
Korlovec, A.L. [Candidate of Technical Sciences]. New Materials for Metallizing	260
The author describes a method of metallizing, claimed to be new, in which metal powder embedded in a plastic filament is used instead of the usual metal wire or powder. Because of the high degree of dispersion of the metal, coatings produced by filament spraying have a fine-grained structure and are more uniform than those produced by the wire or powder methods.	
Korlovec, A.L. [Engineer]. Developing Production Methods for Metallizing Polyamide Powder	263
The author discusses methods of polyamide dispersion and preparation of polyamide powders for metallizing. Performance characteristics of the material are given.	
Strizhevskiy, I.I. [Candidate of Chemical Sciences], and N.I. Pillomonova [Engineer]. Preparation and Properties of Gaseous Flux	267
The author gives technological data on methylboronate methanol flux and makes recommendations for proper storage to prevent hydrolysis.	

STRIZHEVSKIY, Iosif Isaakovich; GUZOV, Samson Getsovich; KOVAL'SKIY,
Veniamin Aronovich; GLIZZHENKO, D.L., kand.tekhn.nauk, red.;
SOBOLEVA, G.N., red.izd-va; MODEL', B.I., tekhn.red.

[Acetylene producing and distributing centers] Atsetilenovye
stantsii. Izd.2., perer. i dop. Moskva, Gos.nauchno-tekhn.
izd-vo mashinostr.lit-ry, 1959. 291 p. (MIRA 12:10)
(Acetylene)

25(6)

SOV/135-59-3-21/24

AUTHORS: Strizhevskiy, I.I., Candidate of Technical Sciences, and
Kal'manovich, S.P., Engineer

TITLE: A New Standard for Water Seals, and Methods of Testing Them
(Novyy standart na vodyanyye zatvory i sposoby ikh is-pytaniy)

PERIODICAL: Svarochnoye proizvodstvo, 1959, Nr 3, pp 40-43 (USSR)

ABSTRACT: Information is presented on the new state standard "GOST 8766-58" for the safety seals of acetylene generators. It is stated that industrial plants have been producing their own safety seals, and not always in conformity with the safety rules. There were no standard regulations for tests of the seals. The new standard includes such test rules. The article includes detailed information on the design and working principles of the water seals, the principles of the

Card 1/2

SOV/135-59-3-21/24

A New Standard for Water Seals, and Methods of Testing Them

tests, and a detailed and illustrated description of a test installation (Fig. p 42). The new designs must now be approved by VNIIAVTOGEN. There is 1 diagram and 1 table.

ASSOCIATION: VNIIAVTOGEN

Card 2/2

SOV/135-59-11-13/26

18(5)

AUTHORS: Strizhevskiy, I.I., Candidate of Technical Sciences, and Kal'manovich, S.P., Engineer

TITLE: Welded Acetylene Tanks

PERIODICAL: Svarochnoye proizvodstvo, 1959, Nr 11, pp 31-33 (USSR)

ABSTRACT: For transportation and storage of dissolved acetylene, balloons of 40 l capacity, Type 40-100 according to GOST 949-57, are used. The shells of these balloons are manufactured from steel seamless tubes 219 mm in diameter with a wall thickness of at least 5.2 mm. The standardized balloon weight is 43.5 kg; however, at the present, the plants manufacture only such balloons which have a wall thickness of 7-8 mm, and sometimes even 8.5 mm. In this case, the weight of a balloon amounts to 63.5 kg. In 1957-58, the VNIIAVTOGEN developed a new welded light weight construction for acetylene balloons of a 60 l capacity. It received the name BAS-1-58 (Fig 1); its pertinent specifications are given in Table 1. There are 1 graph, 2 tables, 1 diagram and 1 photograph.

Card 1/1

ASSOCIATION: VNIIAVTOGEN

5(2)

AUTHOR: Strizhevskiy, I. I.

SOV/32-25-2-9/78

TITLE: The Determination of Boric Acid in Methyl Borate (Opredeleniye bornoy kisloty v metilborate)

PERIODICAL: Zavodskaya Laboratoriya, 1959, Vol 25, Nr 2, p 146 (USSR)

ABSTRACT: For soldering copper alloys an azeotrope mixture of methyl borate (I) and methanol containing about 75 % methyl borate $B(OCH_3)_3$ is used. The quality of this mixture depends on the degree of hydrolysis of (I), i.e. on the influence of moisture. In the present case apart from (I) also boric acid (II) was determined, with the assistance of Technician Z. I. Samsonova, on the basis of its capacity to react with methanol in the presence of an iodine pyridine solution (Ref 2). After the reaction 3 mols water are formed for 1 mol (II), no matter whether methanol, acetic acid, or dioxan (Ref 2) is used as solvent. The titration may be carried out with a micro-burette of the OC type. It was found that samples stored for 2-3 months reached a degree of hydrolysis of 1.24, 1.35, and 1.4 %. The method described may be used for the investigation of the process of saponification of the borates of higher fat

Card 1/2

The Determination of Boric Acid in Methyl Borate

SOV/32-25-2-9/78

alcohols (Ref 4) from paraffin hydrocarbons by the
A. N. Bashkirov method. There are 4 Soviet references.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut avtogennoy
obrabotki metallov (All-Union Scientific Research Institute
for the Autogenous Processing of Metals)

Card 2/2

PHASE I BOOK EXPLOITATION

SOV/4976

Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut avtogennoy
obrabotki metallov

Ekspluatatsiya perenosnykh atsetilenovykh generatorov (Operation of
Portable Acetylene Generators) 2d ed., rev. and enl. Moscow,
Mashgiz, 1960. 78 p. Errata slip inserted. 9,000 copies printed.
(Series: Spravochnyye materialy po gazoplamennoy obrabotke
metallov, vyp. 18)

Compilers: I. I. Strizhevskiy, Candidate of Chemical Sciences, and
V. A. Koval'skiy, Engineer; Ed.: A. N. Shashkov, Candidate of
Technical Sciences; Ed. of Publishing House N. S. Stepanchenko;
Tech. Ed.: A. F. Uvarova; Managing Ed. for Literature on Heavy
Machine Building: S. Ya. Golovin, Engineer.

PURPOSE: This booklet is intended for foremen, gas welders, and
cutters in industrial plants, building organizations, and machine
repair shops.

Card 1/4

Operation of Portable Acetylene Generators

SOV/4976

COVERAGE: The booklet contains concise information of the production of acetylene from calcium carbide and on the arrangement of acetylene generators. Portable acetylene generators manufactured in the USSR are described, and information on their technical characteristics, installation, use, repair, and maintenance is presented. Problems of storing and unpacking calcium carbide are discussed and safety rules for the operation of portable acetylene generators are outlined. D. M. Ofitserov and D. I. Tesmenitskiy helped in the preparation of the manuscript. There are 9 references, all Soviet.

TABLE OF CONTENTS:

I. Introduction	5
1. Production of acetylene [gas] from calcium carbide	6
2. Description of the operation of acetylene generators and the [safety water] seals	9
II. Instructions for the Operation of Generators	18
1. The GVR - 1.25 generator	18

Card 2/4

"APPROVED FOR RELEASE: 08/26/2000

CIA-RDP86-00513R001653530001-7

STRIZHEVSKIY, I. I., kand.khimicheskikh nauk; KAL'MANOVICH, S. P., inzh.

Determination of the granulometric characteristic and specific
surface of calcium carbide pieces of various size. Trudy VNII-
Avtogen no.6:114-133 '60.
(Particle size determination)
(Calcium carbide)

(MIRA 13:8)

APPROVED FOR RELEASE: 08/26/2000

CIA-RDP86-00513R001653530001-7"

STRIZHEVSKIY, I. I., kand.tekhn.nauk; ZAYTSEVA, V.P., insh.

Low-calorie gas carburization. Trudy VIIIAvtogen no.6;140-143 '60.
(MIRA 13:8)

(Case hardening)

11217

S/788/60/000/006/003/004
E202/E392

AUTHOR: Strizhevskiy, I.I., Candidate of Chemical Sciences

TITLE: Diacetylene as a fuel in a gas-welding process

SOURCE: Moscow. vsesoyuznyy nauchno-issledovatel'skiy institut
avtogennoy obrabotki metallov. Trudy. no. 6. 1960.
Kislorodnaya rezka, metallizatsiya, payka. 144-146

TEXT: In view of the increased interest in acetylene syntheses from natural gases, the author envisages that soon there will be a commercial method of producing diacetylene. It is stressed that diacetylene will provide, in many respects, a better fuel than acetylene. The main object of the work is to calculate approximately the flame temperature obtained in a diacetylene welding torch using the following fundamental relation

$$T = \bar{Q} / \sum m c_p x \quad (1)$$

where \bar{Q} is the sum of heats of reactions taking place in the flame in kcal/g.mole, $\sum c_p x$ is the total molecular and atomic-heat content of the gases in the zone under consideration in Card 1/2

Diacetylene as a fuel

S/788/60/000/006/003/004
E202/E392

kcal/g.mole deg. T is the resulting temperature in $^{\circ}\text{K}$ and m is the molecular composition of the products of oxidation in the flame zone. The author also calculates the average temperature of the central zone of the flame on the basis of the degree of hydrogen dissociation. It is concluded that the temperature of the central zone of the diacetylene-oxygen flame should reach approximately 3 600 deg. This figure should be somewhat reduced if the oxygen dissociation is taken into consideration. The high temperature of diacetylene-oxygen flames is explained by the considerable endothermicity of diacetylene and low ratio of hydrogen and carbon atoms in the C_4H_2 molecule as well as by the considerable stability of CO (210.3 kcal/g.mole) which comprises 80% of the volume in the central zone of the flame. It is recommended that a diacetylene-oxygen flame be studied as a possible means of welding, hard-facing and spraying of refractory materials. There is 1 table.

Card 2/2

STRIZHEVSKIY, I.I., kand.khimicheskikh nauk; KAL'MANOVICH, S.P., inzh.

Material balance of the carbide hydrolysis process in
"carbide to water"-type generators. Trudy VNIIAvtogen
no.7:148-166 '60. (MIRA 13:7)
(Acetylene generators)

STRIZHEVSKIY, I.I., kand.khimicheskikh nauk

Porous materials for acetylene cylinders. Trudy VNIIAvtogen
no.7:177-186 '60. (MIRA 13:?)
(Acetylene—Storage)
(Porous materials)

STRIZHEVSKIY, I. I., kand.khim.nauk

Rapid filling of acetylene cylinders. Svar.proizv. no.8:
28-29 Ag '60. (MIRA 13:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut avtogennoy
obrabotki metallov.
(Acetylene)